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MINUTES FROM CONFERENCE CALL TO DISCUSS INVESTIGATION AND REMEDY OPTIONS AT TANK FARMS 1, 2 AND 3 AT DEFENSE FUEL SUPPY POINT NS NEWPORT RI
4/9/2009
TETRA TECH EC

DFSP MELVILLE CONFERENCE CALL
MEETING MINUTES
April 9, 2009 11:00 – 13:30

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General Discussion

- BRAC process initiated for Tank Farms 1, 2 and 3
  Cornelia has brought potentially interested parties through Tank Farms 1 and 2. At this point, it has been mainly local interests, e.g., town councilors. Interest in the properties should be expressed by June 5, 2009.

- Status of DESC license to operate at NAVSTA Newport
  A new license has not been signed by DESC. The tank farms have not been used for fuel storage since the mid-1990s.

- Applicability of CERCLA to Tank Farms 1, 2, and 3
  There is still some question as to why these sites are under CERCLA. Petroleum cleanup is being performed by DESC under RIDEM Waste Management/UST regulations to the industrial/commercial direct exposure criteria (ICDEC). However, RIDEM's comments to DESC include requests for investigation into items that would be addressed under the CERCLA program. This is the reason DESC has not been able to achieve site closure from RIDEM. Closure documentation for the USTs has not been received from RIDEM either.

- Estimated time frame for the AOCs investigation at the Tank Farm 1.
  Jack to follow up with Winoma and Cornelia on this issue.

- Investigation/remediation scope for DESC petroleum-related operations
  DESC's investigation and clean up efforts have been focused on releases of petroleum fuel (surface spills, releases from distribution piping). In the 1990s, DESC contractor GZA installed numerous wells at all three tanks farms to evaluate subsurface soil and groundwater. In addition, all USTs and fuel lines were cleaned in the late 1990s when these tank farms were decommissioned and again in early 2000 per RIDEM's request.

  Also in early 2000, the DESC contractor (Tetra Tech) focused on evaluating aerial photography to identify potential areas of surface contamination (releases, sludge pits, etc.). Comprehensive work plans were developed for all three tank farms. The work at Tank Farms 2 and 3 has been completed and draft remedial action reports were submitted to RIDEM (2005 and 2006). No comments have been received from RIDEM. In addition, RIDEM stated that the Tank Farm 1 work should not be implemented until Tank Farms 2 and 3 are cleaned up. Contact and correspondence with RIDEM indicates they want areas investigated for non-petroleum related contamination, which is outside of the DESC investigation/remediation scope. Cornelia believes these requests are based on the cleanup/installation restoration work conducted by the Navy at Tank Farms 4 and 5.

- DESC Storage of Avgas at the Tank Farms (concerns about lead in groundwater)
  DESC may have stored avgas at Tank Farm 3. Hasan indicated he could research some information at the DESC Office.

  UPDATE 9/2/09: Total and dissolved lead samples were collected from monitoring wells at Tank Farms 1, 2, and 3. There is no indication in the laboratory results that lead is a contaminant of concern at these sites. Groundwater monitoring reports for each tank farm have been prepared and were distributed in late July (Tank Farm 3) and early September (Tank Farms 1 and 2).

- Responses to Comments for Tank Farm 2 Monitoring Well Installation Work Plan distributed on March 3, 2009.

- Responses to Comments for Tank Farm 3 Addendum 1 to Work Plan for Site Closure at Tank Farm 3 distributed on March 11, 2009.

  Based on preliminary discussions, TtEC has reviewed the responses to clarify that petroleum-related work is complete. Current wording may lead RIDEM to believe that Navy will address petroleum under CERCLA. Also, sending a more concise response letter would likely be more effective at getting a response from RIDEM. Therefore, TtEC has also eliminated some of the background information included in the responses. Where necessary/appropriate, the information has been referenced to a particular document that has already been submitted to RIDEM.

Tank Farm 1

- Tank Farm 1 ethyl-lead blending plant
  This plant existed when DESC leased the tank farms and was not used by DESC. Due to uncertainty about what remains in this area, TtEC (Richard Claydon) as a courtesy to the Navy, conducted a site walk on April 13, 2009. There are two structures; both are constructed of reinforced concrete (site cast) and each have two stories, one at or aboveground level and a lower level. It appears that all connecting piping has been removed. There were two disconnected pumps still in the structure (see attached photographs).

  Note that the areas identified for investigation under the Tank Farm 1 work plan (AOCs TF1-004, TF1-005, and TF1-018) are focused on drainage areas in the vicinity of the plant, but do not propose to conduct any work within the structure itself.

- Fuel Distribution Piping
  Fuel lines are contained in a concrete pipe chase that runs to the Fuel Loading Area (backyard area) to Building 58 (north booster pump house) and the North Wharf. Fuel lines have been cleaned on two occasions (late 1990s and 2000s) for all tanks except for Tanks 9 and 10, which were converted into water storage tanks for the ring drain (groundwater discharge) system.

  As shown from drawings C-1 through C- 9 from the "Fuel Distribution Piping and Equipment Cleaning and Decommission" task in 2002 (see attached pdf), fuel lines in Tank Farm 1 were either cleaned or investigated. As shown on the drawing, lines that were cleaned and decommissioned by TtEC (then Foster Wheeler) from 11/01 to 3/02 are indicated in green. Lines investigated only by TtEC from 11/01 to 3/02 and found to be cleaned, or cleaned and decommissioned by others, are indicated in blue. Lines not cleaned, with product still in line,

are indicated in magenta. Lines not cleaned, destroyed, removed or end-buried are indicated in red.

Fuel lines from Tank Farm 1 run from three points: William's Hole, Pump House No. 30 (between Tanks 9 and 10), and Chamber 166 (C-166), which then converge to C-35, to Building 58, then ends at North Wharf.

- Ring Drain System
  The ring drain system at Tank Farm 1 is a gravity flow system. Work proposed under the Tank Farm 1 work plan includes locating sampling points (manholes) and collecting samples for TPH DRO and GRO analysis. The ring drain system previously flowed directly to the oil/water separator at the backyard area prior to being discharged through Outfall 008. The system was modified by the Navy to direct water to Tanks 9 and 10 for water storage prior to draining to the oil/water separator at the backyard area. Water is ultimately discharged into Narragansett Bay through Outfall 008. This discharge is conducted under the Navy's RIPDES permit.

  During the Tank Farm 1 groundwater monitoring event, access points to the ring drain system could not be located. A number of valve locations were indicated on the drawing these were located; however, there was no access to the ring drains, only the valve handle directly entering a concrete structure.

  The ring drain system has not been cleaned and is currently in use. This is a gravity-flow system and is identified as the outer dashed lines around the tanks in Figure 1-2, cad file No. Desc003b.dwg, entitled "Tank Farm 1 Site Plan." No manholes have been discovered at Tank Farm 1.

- Bottom Sediment and Water (BSW) Piping
  Drawings indicate some of the BSW piping is in the chase with the fuel distribution piping and runs to Building 58 at the backyard area where it is shown to terminate at the bay. Some of the BSW piping is shown to be direct buried lines that terminate at the railroad tracks.

  As shown from drawings C-1 through C- 9 from the "Fuel Distribution Piping and Equipment Cleaning and Decommission" task in 2002 (see attached drawings), BSW lines in Tank Farm 1 were either cleaned or investigated. As shown on the drawings, lines that were cleaned and decommissioned by TtEC (then Foster Wheeler) from 11/01 to 3/02 are indicated in green. Lines investigated only by TtEC from 11/01 to 3/02 and found to be cleaned, or cleaned and decommissioned by others, are indicated in blue. Lines not cleaned with product still in line are indicated in magenta. Lines not cleaned, destroyed, removed or end-buried are indicated in red.

Tank Farm 2

- PCBs in Soil Adjacent to Transformer Building 219
  DESC conducted surface soil sampling (0 to 6 inches) for PCBs at this location per RIDEM's request and as a courtesy to the Navy. Two samples indicate PCB concentrations exceeding the RDEC and ICDEC (both 10 ppm). DESC did not implement further action as PCBs are outside of scope for cleanup (petroleum only relating to fueling operations). This information is documented in the Remedial Action Report (July 2006).

- SVOCs in Soil Below Tank 25 Vent
  Samples collected from 0 to 12 inches. Some SVOCs exceed the RDEC but not the ICDEC, which is the DESC clean up goal. DESC did not implement further action since concentrations were below the ICDEC.

- Lead in Soil Adjacent to Battery Building 218
  DESC conducted surface soil sampling (0 to 6 inches) for lead at this location per RIDEM's request and as a courtesy to the Navy. Results indicated lead was present at a concentration exceeding the RDEC (150 ppm) but below the ICDEC (500 ppm). No further action taken.

- Fuel Distribution Piping
  Fuel lines are contained in a concrete pipe chase that runs to the Fuel Loading Area to Building 58 and the North Wharf. Fuel lines have been cleaned on two occasions (late 1990s and 2000s).

  As shown from drawings C-1 through C- 9 from the "Fuel Distribution Piping and Equipment Cleaning and Decommission" task in 2002 (see attached drawings), fuel lines in Tank Farm 2 were either cleaned or investigated. As shown on the drawings, lines that were cleaned and decommissioned by TtEC (then Foster Wheeler) from 11/01 to 3/02 are indicated in green. Lines investigated only by TtEC from 11/01 to 3/02 and found to be cleaned, or cleaned and decommissioned by others, are indicated in blue. Lines not cleaned with product still in line are indicated in magenta. Lines not cleaned, destroyed, removed or end-buried are indicated in red.

  Fuel lines from Tank Farm 2 run from two points: Chamber 12 (C-12) and Chamber 13 (C-13). From C-12, at the beginning of North Trench between Tanks 19 and Tank 21, fuel lines run through C-25 (utility chamber), pass Building 42 through C-33 to Building 58, then ends at North Wharf. From C-13, at the beginning of South Trench between Tanks 20 and 25, fuel lines run through the South Booster Pump House Building 39 to C-23, to Building 231, to C- 31 to C-32, to C-35A to Building 58, then ends at North Wharf.

- Ring Drains
  The Tank Farm 2 ring drain system has sumps that were pumped from the tank bottoms to the collection system. Unlike Tank Farms 1 and 3, this ring drain system is a closed system and not easily accessible. The power to the system was turned off in 2001. Similarly to Tank Farm 1, the ring drain system used to go directly to the oil/water separator at the Fuel Loading Area prior to discharge at Outfall 008. The system was modified to flow first to Tanks 9 and 10 at Tank Farm 1 prior to flowing to the oil water/separator at the Fuel Loading Area, and ultimately being discharged into the bay via Outfall 008.

  Ring Drain System – (cleaned unknown). The ring drain system is a pump flow system and is identified as the outer dashed lines around the tanks in Figure 2-2, cad file No. Desc002c.dwg, entitled "Tank Farm 2 Site Plan." Manholes unknown.

- BSW Piping
  Drawings indicate that BSW piping runs to the Fuel Loading Area and then to Building 58 and North Wharf.

  As shown from drawings C-1 through C- 9 from the "Fuel Distribution Piping and Equipment Cleaning and Decommission" task in 2002 (see attached drawings), BSW lines in Tank Farm 2 were either cleaned or investigated. As shown on the drawings, lines that were cleaned and decommissioned by TtEC (then Foster Wheeler) from 11/01 to 3/02 are indicated in green.

Lines investigated only by TtEC from 11/01 to 3/02 and found to be cleaned, or cleaned and decommissioned by others, are indicated in blue. Lines not cleaned with product still in line are indicated in magenta. Lines not cleaned, destroyed, removed or end-buried are indicated in red.

- Biopile Test Summary
  Based on the data collected during the pilot test, it was determined that a separate remedial alternative was required for soil excavated from the site. After consultation with DESC and the Navy, off-site disposal was selected as the remedial alternative. Off-site disposal was conducted during December 2008 and February 2009. The soil was categorized as non-hazardous and acceptable for cover material at a lined landfill (Waste Management-Taunton). The results of the confirmatory sampling completed from underneath the test and stockpile areas indicated that TPH results were below the RDEC.

  UPDATE 7/9/09: This document was finalized and submitted to RIDEM Waste Management (Paul Kulpa) and the Navy (Cornelia Mueller) on 4/28/09.

Tank Farm 3

- Groundwater Gauging and Sampling
  Per request of the Navy received on February 20, 2009, DESC is planning to complete a round of groundwater gauging and sampling. As discussed on the conference call, the gauging results were provided to the Navy prior to implementing the groundwater sampling event in order to obtain concurrence on the sampling approach (selected wells, sampling method, analyses). The groundwater gauging was completed on April 13, 2009. The results were summarized and distributed to the Navy.

  As per RIDEM's Remediation Regulations (DEM-DSR-01-93) Section 7.0 Subsection 6 (7.06), it may be appropriate to submit these results to RIDEM as a progress report for Tank Farm 3.

  UPDATE 9/2/09: Groundwater monitoring report has been prepared. The Tank Farm 3 report was completed in late July. At the RAB meeting on 5/20/09, Paul Kulpa expressed an interest in receiving a copy of the report, but understood that the work was performed by DESC per the request of the Navy.

- TPH Concentrations Exceed ICDECs Near Former Burn Pit
  The former burn pit (also known as the sand filter) is identified as TF3-ACO-001. All BSW piping from Tanks 32, 33, 34, 35, and 36 connected to the former burn pit. Water/oil flowed in through the top and water discharged through the sand leaving fuel residuals on top. The filter was occasionally burned when clogged with fuel. The area was no longer in use in the 1980s, so a layer of fill was placed and the area was paved. As documented in the Remedial Action Report (2005), the sand filter was excavated and the structure was pressure washed. The ICDEC for TPH could not be achieved due to the instability of the excavation. No further action was taken. The final depth of excavation was 7.6 feet below ground surface.

- BSW Piping
  Drawings indicate that BSW piping runs to the sand filter (see above).

  As shown on Figure 1-2, cad file no. DESC004d.dwg, entitled "Tank Farm 3 Site Plan and Fuel Distribution Piping" (see attached drawing), BSW lines in Tank Farm 3 are shown in relation to the Tank Farm 3 fuel lines and ends near the dam at Outfall #005; unknown if cleaned or not.

- TPH Concentrations Exceed ICDECs in Former Pit TF3-AOC-004
  This area is a depression area identified for investigation based on aerial photography. Soil was inaccessible below 5 to 6 feet; however, the TPH concentrations in confirmatory samples were still above the ICDEC. No further action was taken. The final depth of excavation varied between 4 and 6 feet below ground surface.

- Sediment Sampling at Outfall 005
  RIDEM requested a sediment sample at the outfall and this work was included in an addendum to the Tank Farm 3 work plan dated October 2007. Work was not implemented due to significant comments received from RIDEM (see General Discussion). Based on Lawton Brook emergency response work conducted in 2008 and the alum sludge discharges observed coming from the Lawton Valley reservoir, DESC is not going to implement the sediment sampling at the outfall.

- Inspection of Structure 227
  RIDEM requested a site walk at Structure 227 to look for signs of battery storage. This task was included in an addendum to the Tank Farm 3 work plan dated October 2007 as a courtesy to the Navy. Significant comments were received and the work was not implemented (see General Discussion). On April 13, 2009, TtEC (Richard Claydon) confirmed that Structure 227 is an electrical control house.

- Fuel Distribution Piping
  Fuel lines are contained in a concrete pipe chase that runs in a concrete pipe chase to the Fuel Loading Area to Building 58 and the North Wharf. Fuel lines have been cleaned on two occasions (late 1990s and 2000s). A portion of the chase and piping (300 feet) were removed in 2008 under the Lawton Brook Emergency Response Action.

  As shown from drawing C-1 from the "Fuel Distribution Piping and Equipment Cleaning and Decommission" task in 2002 (see attached drawing), fuel lines come from the stripper pit area from Tank Farm 3. On this C-1 drawing, the fuel line was either cleaned or investigated. As shown on the drawing, lines that were cleaned and decommissioned by TtEC (then Foster Wheeler) from 11/01 to 3/02 are indicated in green. Lines investigated only by TtEC from 11/01 to 3/02 and found to be cleaned, or cleaned and decommissioned by others, are indicated in blue. Lines not cleaned with product still in line are indicated in magenta. Lines not cleaned, destroyed, removed or end-buried are indicated in red.

  However, on another C-1 drawing, cadfile no. DESC014.dwg, entitled "Soil Gas and Soil Test Boring Location Plan," it is indicated that the underground fuel lines from Tank Farm 3 to the Fuel Loading Area were cleaned and closed in place between June 1996 and May 1997 (see drawing).

  Fuel lines from Tank Farm 3 run from the stripper pit from Tank Farm 3 to the vent and valve pit between South Access Road and Defense Highway to Building 231 to C- 31 to C-32 to C-35A to Building 58, then ends at North Wharf.

- Oil/Water Separator
  The ring drain system piping flows to the oil/water separator prior to discharge into Lawton Brook through Outfall 005, which is approximately 100 yards upstream of Narragansett Bay. The discharge is regulated under the Navy's RIPDES permit. The oil/water separator was inspected during the Lawton Brook work conducted in 2008, and there were no signs of odors, sheen or product.

- Ring Drain System
  The ring drain system at Tank Farm 3 is a gravity-flow system. The ring drain system piping flows to the oil/water separator prior to discharge into Lawton Brook through Outfall 005 (see above). An inspection of the ring drain manholes was conducted on April 13, 2009. No signs of sheen or product were observed. The results were summarized in the Tank Farm 3 Groundwater Monitoring Report and distributed to the Navy only.

  As per RIDEM's Remediation Regulations (DEM-DSR-01-93) Section 7.0 Subsection 6 (7.06), it may be appropriate to submit these results to RIDEM as a progress report for Tank Farm 3.

  UPDATE 9/2/09: Groundwater monitoring reports have been prepared. The Tank Farm 3 report was completed in July. At the RAB meeting on 5/20/09, Paul Kulpa expressed an interest in receiving a copy of the report, but understood that the work was performed by DESC per the request of the Navy.

  Ring Drain System – (cleaned unknown). The ring drain system is a gravity-flow system and is identified as the outer dashed lines around the tanks in Figure 1-2, cad file No. DESC004a.dwg, entitled "Tank Farm 3 Site Plan and Fuel Distribution Piping" (see attached drawing). Manholes are shown and labeled as RD- # (Ring Drain Manhole number).

- Swale Sampling North of Tank 69
  This asphalt-lined swale, located north of Tank 69, was inspected in 2004 during investigation and remediation activities. A reconnaissance of this discharge area showed a great deal of erosion at the pipe outfall but no visual or olfactory evidence of TPH. Sampling was not conducted because the area was outside of the Tank Farm 3 fence line and was not accessible. On April 13, 2009, Fran Furtado (NAVSTA Newport DigSafe) was on site to review the area. The swale leads to a concrete headwall and buried 12-inch drainpipe that discharges beyond the security fence. Ownership of the land behind the fence is not certain.

- As a courtesy to the Navy, TtEC (Richard Claydon) confirmed that Structure 228 is a valve house. Based on drawings of the site and subsurface piping configuration, this valve house contains piping from Tanks 69 and 70. These valves were likely used to shut down flow for maintenance purposes.

<u>Other Items</u>

- Regarding these other structures, Fran Furtado provided a Utilities Request Form that should be filled out to obtain information on Buildings 230 and 108.
  - Building 230 – based on drawings, this building is believed to be the active transformer at the entrance to Tank Farm 3.
    On 4/16/09, a site walk of the Building 230 area was conducted by Richard Claydon as a courtesy to the Navy. Observations determined that this building is outside of the Tank Farm 3 fence line. Posted signs indicate this is Substation 12 (see Photograph 1).
  - Building 108 – based on drawings, this building is believed to be the valve house along the east side of Defense Highway and on the south side of Lawton Brook near the Tank Farm 3 entrance.
    On 4/16/09, a site walk of the Building 108 area was conducted by Richard Claydon as a courtesy to the Navy. Observations determined that this building is outside of the Tank Farm 3 fence line. Only a concrete foundation remains. It appears Building 108 is not a valve house but rather a former transformer location (see Photograph 2).

Photograph 1: Building 230 entrance (outside of Tank Farm 3 fence line) 4/16/09

Photograph 2: Building 108 Area (outside of Tank Farm 3 fence line) 4/16/09